

AGRICULTURE AND LAND STEWARDSHIP DEPARTMENT[21]

Adopted and Filed

Rulemaking related to weights and measures

The Agriculture and Land Stewardship Department hereby rescinds Chapter 85, “Weights and Measures,” Iowa Administrative Code, and adopts a new chapter with the same title.

Legal Authority for Rulemaking

This rulemaking is adopted under the authority provided in Iowa Code sections 214.10, 214A.1A, 215.24 and 215A.3 and 2023 Iowa Acts, House File 666.

State or Federal Law Implemented

This rulemaking implements, in whole or in part, Iowa Code chapters 214, 214A, 215 and 215A and 2023 Iowa Acts, House File 666.

Purpose and Summary

This rulemaking updates the State’s weights and measures rules by removing outdated or redundant provisions that are covered by statute. The rulemaking also simplifies and restructures the chapter to enhance readability for the public.

Additionally, the rulemaking implements 2023 Iowa Acts, House File 666, by adopting rules related to testing the accuracy and correctness of electric vehicle charging stations to assist in the proper collection of Road Use Tax Fund moneys. The standards being utilized are included in the 2023 version of the National Institute of Standards and Technology Handbook 44.

Public Comment and Changes to Rulemaking

Notice of Intended Action for this rulemaking was published in the Iowa Administrative Bulletin on September 20, 2023, as **ARC 7072C**. A public hearing was held on October 13, 2023, at 2 p.m. in the Second Floor Conference Room, Wallace State Office Building, Des Moines, Iowa. No one attended the public hearing.

Three comments were received. All comments encouraged the Department to update the ASTM reference date for biodiesel standards since those have recently changed. This request has been incorporated into rule 21—85.20(214A,208A).

Adoption of Rulemaking

This rulemaking was adopted by the Department on November 9, 2023.

Fiscal Impact

This rulemaking has no fiscal impact to the State of Iowa.

Jobs Impact

After analysis and review of this rulemaking, no impact on jobs has been found.

Waivers

Any person who believes that the application of the discretionary provisions of this rulemaking would result in hardship or injustice to that person may petition the Department for a waiver of the discretionary provisions, if any, pursuant to 21—Chapter 8.

Review by Administrative Rules Review Committee

The Administrative Rules Review Committee, a bipartisan legislative committee which oversees rulemaking by executive branch agencies, may, on its own motion or on written request by any individual or group, review this rulemaking at its [regular monthly meeting](#) or at a special meeting. The Committee's meetings are open to the public, and interested persons may be heard as provided in Iowa Code section 17A.8(6).

Effective Date

This rulemaking will become effective on January 17, 2024.

The following rulemaking action is adopted:

ITEM 1. Rescind 21—Chapter 85 and adopt the following **new** chapter in lieu thereof:

CHAPTER 85
WEIGHTS AND MEASURES

21—85.1(215) Definitions.

“Automatic grain scale” means a scale constructed with a mechanical device so that a stream of grain flowing into its hopper can be checked at any given weight, long enough to register said weight and dump the load. The garner above the scale should have at least three times the capacity of the scale to ensure a steady flow at all times.

1. On automatic-indicating scales. On a particular scale, the maintenance tolerances applied shall be not smaller than one-fourth the value of the minimum reading-face graduation; the acceptance tolerances applied shall be not smaller than one-eighth the value of the minimum reading-face graduation.

2. However, on a prepacking scale (D.11, D.12) having graduated intervals of less than one-half ounce, the maintenance tolerances applied shall not be smaller than one-eighth ounce and the acceptance tolerances applied shall be not smaller than one-sixteenth ounce.

“Counter scale” means a scale of any type that is especially adopted on account of its compactness, light weight, moderate capacity and arrangements of parts for use upon a counter, bench, or table.

“Motor truck scale” means a scale built by the manufacturer for the use of weighing commodities transported by motor truck.

This rule is intended to implement Iowa Code section 215.18.

21—85.2(189,215) Weights and measures.

85.2(1) The specifications, tolerances and regulations for commercial weighing and measuring devices, together with amendments thereto, as recommended by the National Institute of Standards and Technology (NIST) and published in NIST Handbook 44 amended or revised as of January 1, 2020, shall be the specifications, tolerances and regulations for commercial weighing and measuring devices in the state of Iowa, except as modified by state statutes, or by rules adopted and published by the Iowa department of agriculture and land stewardship and not rescinded.

85.2(2) The NIST Handbook 130, Uniform Laws and Regulations in the Areas of Legal Metrology and Fuel Quality, Handbook 133, Checking the Net Contents of Packaged Goods, Type Evaluation, and all supplements to these handbooks, as published by the NIST amended or revised as of January 1, 2020, are adopted in their entirety by reference except as modified by state statutes, or by rules adopted and published by the department.

This rule is intended to implement Iowa Code sections 189.9, 189.13, 189.17, 215.14, 215.18 and 215.23.

21—85.3 to 85.9 Reserved.

WEIGHTS AND SCALES

21—85.10(215) Scale design. A scale shall be of such materials and construction that (1) it will support a load of its full nominal capacity without developing undue stresses or deflections, (2) it may reasonably be expected to withstand normal usage without undue impairment of accuracy or the correct functioning of parts, and (3) it will be reasonably permanent in adjustment.

85.10(1) Stability of indications. A scale shall be capable of repeating with reasonable precision its indications and recorded representations. This requirement shall be met irrespective of repeated manipulation of any scale element in a manner duplicating normal usage, including:

- a. Displacement of the indicating elements to the full extent allowed by the construction of the scale,
- b. Repeated operation of a locking device, and
- c. Repeated application or removal of unit weights.

85.10(2) Interchange or reversal of parts. Parts that may readily be interchanged or reversed in the course of normal usage shall be so constructed that their interchange or reversal will not materially affect the zero-load balance or the performance of the scale. Parts which may be interchanged or reversed in normal field assembly shall be:

- a. So constructed that their interchange or reversal will not affect the performance of the scale, or
- b. So marked as to show their proper positions.

85.10(3) Pivots. Pivots shall be made of hardened steel, except that agate may be used in prescription scales, and shall be firmly secured in position. Pivot knife-edges shall be sharp and straight, and cone-pivot points shall be sharp.

85.10(4) Position of equipment, primary or recording indicating elements (electronic weighing elements). A device equipped with a primary or recording element shall be so positioned that its indications may be accurately read and the weighing operations may be observed from some reasonable “customer” position; the permissible distance between the equipment and a reasonable customer position shall be determined in each case upon the basis of individual circumstances, particularly the size and character of the indicating element; a window large enough should be placed in the building and the installation should be so arranged as to afford an unobstructed view of the platform.

This rule is intended to implement Iowa Code section 215.18.

21—85.11(215) Scale pit.

85.11(1) In the construction of a scale pit, walls must be of reinforced concrete. A slab floor must be installed in the pit. The floor must be at least 12 inches thick with a minimum of grade 40 reinforcement rod running into all piers and sidewalls, installed according to the manufacturer’s specifications. There shall be an approach at each end of the scale of not less than ten feet, and said approach shall be of reinforced concrete 12 inches thick on a level with the scale deck. A slope of a one-inch drop across the ten-foot span may be allowed for drainage.

85.11(2) Electronic scales shall have a vertical clearance of not less than four feet from the floor line to the bottom of the I-beam of the scale bridge, thus providing adequate access for inspection and maintenance. The load-bearing supports of all scales installed in a fixed location shall be constructed to ensure the strength, rigidity and permanence required for proper scale performance.

This rule is intended to implement Iowa Code section 215.15.

21—85.12(215) Pitless scales. A person may install pitless electronic, self-contained and vehicle scales in a permanent location provided the following conditions for the construction are incorporated:

85.12(1) Scale installation applications and permits must be submitted to the department the same as the pit scale installation, with specifications being furnished by the manufacturer, for approval.

85.12(2) Piers shall extend below the frost line or be set on solid bedrock, and they shall be of reinforced concrete.

85.12(3) A reinforced concrete slab the width of the scale, at least six inches thick, shall run full length under the scale. Slab and piers shall be tied together with reinforcement rod, with a minimum clearance of eight inches between floor and weighbridge.

85.12(4) Reinforced Portland cement approaches at least 12 inches thick, ten feet long and as wide as the scale shall be provided on each end in a level plane with the scale platform.

85.12(5) A scale shall be installed at an elevation to ensure adequate drainage away from the scale.

85.12(6) A scale platform and indicator shall be protected from wind and other elements that could cause inaccurate operation of the scale. Protection modifications that attach to or touch the scale or parts attached to the scale shall be approved by the department prior to installation.

This rule is intended to implement Iowa Code section 215.14.

21—85.13(215) Master weights. Master scale test weights used for checking scales after being overhauled must be sealed as to their accuracy once every two years. Said weights after being sealed are to be used only as master test weights.

This rule is intended to implement Iowa Code section 215.17.

21—85.14(215) Provision for sealing coin slot. Provision shall be made on a coin-operated scale for applying a lead and wire seal in such a way that insertion of a coin in the coin slot will be prevented.

This rule is intended to implement Iowa Code section 215.18.

21—85.15(215) Lengthening of platforms. The length of the platform of a vehicle scale shall not be increased beyond the manufacturer's designed dimension except when the modification has been approved by a competent scale-engineering authority, preferably that of the engineering department of the manufacturer of the scale, and by the weights and measures bureau.

This rule is intended to implement Iowa Code section 215.18.

21—85.16(215) Accessibility for testing purposes. A large capacity scale shall be so located, or such facilities for normal access thereto shall be provided, that the test weights of the weights and measures official, in the denominations customarily provided, and in the amount deemed necessary by the weights and measures official for the proper testing of the scale, may readily be brought to the scale by the customary means; otherwise, it shall be the responsibility of the scale owner or operator to supply such special facilities, including necessary labor, as may be required to transport the test weights to and from the scale, for testing purposes, as required by the weights and measures official. If the design, construction or location of a large-capacity scale is such as to require a testing procedure involving special accessories or an abnormal amount of handling of test weights, such accessories or needed assistance in the form of labor shall be supplied by the owner or operator of the scale, as required by the weights and measures official.

This rule is intended to implement Iowa Code sections 215.1A and 215.10.

21—85.17(215) Wheel-load weighers and axle-load scales. The requirements for wheel-load weighers and axle-load scales apply only to such scales in official use for the enforcement of traffic in highway laws or for the collection of statistical information by government agencies.

This rule is intended to implement Iowa Code section 215.18.

21—85.18 and 85.19 Reserved.

MEASURES

21—85.20(214A,208A) Motor fuel and antifreeze tests and standards.

85.20(1) In the interest of uniformity, the tests and standards for motor fuel, including but not limited to renewable fuels such as ethanol blended gasoline, biodiesel, and biodiesel blended fuel, and components such as an oxygenate, raffinate natural gasoline and motor vehicle antifreeze shall be those established by ASTM International in effect on June 30, 2023, with the following exceptions:

- a. Biodiesel blended fuel classified as higher than B-20 but less than B-99.
- b. Tests and standards that are otherwise required by statute.

85.20(2) The components used to produce biodiesel blended fuel classified as higher than B-20 but less than B-99 must meet the following department standards:

- a. The biodiesel must meet ASTM International specification D6751.
- b. The diesel must meet ASTM International specification D975.

85.20(3) Diesel fuel that does not comply with ASTM International specifications may be blended with biodiesel, additives, or other diesel fuel so that the finished blended product does meet the applicable specifications.

This rule is intended to implement Iowa Code sections 208A.5, 208A.6, 214A.2, and 215.18.

21—85.21(215) Tolerances on petroleum products measuring devices. All pumps or meters at filling stations may have a tolerance of not over five cubic inches per five gallons, minus or plus. All pumps or measuring devices of a large capacity shall have a maintenance tolerance of 50 cubic inches, minus or plus, on a 50-gallon test. An additional one-half cubic inch tolerance shall be added per gallon over and above a 50-gallon test. Acceptance tolerances on large capacity pumps and measuring devices shall be one-half the maintenance tolerances.

This rule is intended to implement Iowa Code sections 214.2 and 215.20.

21—85.22(215) Meter adjustments and tagging. If a meter is found to be incorrect and also capable of further adjustment, said meter shall be adjusted, rechecked and sealed. If a seal is broken for any cause other than by a state inspector, the department shall be promptly notified of same.

85.22(1) Companies specializing in testing and repairing gasoline and fuel oil dispensing pumps or meters shall be registered with the weights and measures bureau upon meeting requirements set forth by the department.

85.22(2) In accordance with the NIST Handbook 44, accredited repair and testing companies shall be authorized to affix a security seal, properly marked with the identification of such company.

85.22(3) If a meter is found to be inaccurate, an inspection report shall be left by the inspector requiring repair. After the meter has been repaired and placed in service, the licensee shall notify the weights and measures bureau.

85.22(4) If the meter has not been repaired within 30 days, the meter may be condemned and a red condemned tag may be attached to the meter.

This rule is intended to implement Iowa Code sections 215.5, 215.12 and 215.20.

21—85.23(215) Servicer's license fee. The fee for a servicer's license shall be \$10.

This rule is intended to implement Iowa Code section 215.23.

21—85.24(215) Recording elements. All weighing or measuring devices shall be provided with appropriate recording or indicating elements, which shall be definite, accurate and easily read under any conditions of normal operation of the device. Graduations and a suitable indicator shall be provided in connection with indications and recorded representations designed to advance continuously. Graduations shall not be required in connection with indications or recorded representations designed to advance intermittently or with indications or recorded representations of the selector type.

This rule is intended to implement Iowa Code section 215.18.

21—85.25(215) Air eliminator. All gasoline or oil metering devices shall be equipped with an effective air eliminator to prevent passage of air or vapor through the meter. The vent from such eliminator shall not be closed or obstructed.

This rule is intended to implement Iowa Code section 215.18.

21—85.26(215) Delivery outlets. No means shall be provided by which any measured liquid can be diverted from the measuring chamber of the meter or the discharge line therefrom. However, two or more delivery outlets may be installed, if automatic means is provided to ensure that liquid can flow

from only one such outlet at one time and the direction of flow for which the mechanism may be set at any time is definitely and conspicuously indicated.

This rule is intended to implement Iowa Code section 215.18.

21—85.27(215) LP-gas delivery. In the delivery of LP-gas by commercial bulk trucks (bobtail) across state lines, it shall be mandatory for all trucks delivering products in Iowa to be equipped with a meter that has been licensed by the state of Iowa and carries the seal of an accredited meter service and proving company.

This rule is intended to implement Iowa Code section 215.20.

21—85.28(215) LP-gas meter registration. The location of all LP-gas liquid meters in retail trade shall be listed, by the owner, with the department. Upon putting a new or used meter into service in the state of Iowa, the user shall report to the weights and measures bureau.

This rule is intended to implement Iowa Code section 215.20.

21—85.29(214A,215) Advertisement of the price of liquid petroleum products for retail use.

85.29(1) Nothing in this rule shall be deemed to require that the price per gallon or liter or any grade or kind of liquid petroleum product sold on the station premises be displayed or advertised except on the liquid petroleum metering distribution pumps.

85.29(2) Petroleum product retailers, if they elect to advertise the unit price of their petroleum products at or near the curb, storefront or billboard, shall display the price per gallon or liter. The advertised price shall equal the computer price settings shown on the metering pump or shall be displayed in a manner clear to the purchaser for discounts offered for cash payment. Product names displayed shall match the product names on the retail motor fuel dispensers and all consumer receipts.

85.29(3) Notwithstanding the provisions of subrule 85.29(2), cash only prices may be posted by the petroleum marketer on the following basis:

a. Cash only prices must be disclosed on the posted sign as “cash only” or similar unequivocal wording in lettering 3” high and ¼” in stroke when the whole number price being shown is 36” or less in height; or in lettering at least 6” high and ½” in stroke when the whole number price being shown is more than 36” in height.

b. Cash prices posted or advertised must be available to all customers, regardless of type of service (e.g., full service or self-service); or grade of product (e.g., regular, unleaded, gasohol and diesel).

c. Cash and credit prices or discounts must be prominently displayed on the dispenser.

d. A chart showing applicable cash discounts expressed in terms of both the computed and posted price shall be available to the customer on the service station premises.

85.29(4) On all outside display signs, the whole number shall not be less than 6” in height and not less than 3/8” in stroke, and any fraction shall be at least one-third of the size of the whole number in both height and width.

85.29(5) The price must be complete, including taxes, without any missing numerals or fractions in the price.

85.29(6) Price advertising signs shall identify the type of product (e.g., regular, unleaded, gasohol and diesel), in lettering at least 3” high and ¼” in stroke when the whole number price being shown is 36” or less in height, or in lettering at least 6” high and ½” in stroke when the whole number price being shown is more than 36” in height.

85.29(7) A price advertising sign shall display if the price is in liters, and may display if the price is in gallons, the unit measure in letters of 3” minimum.

85.29(8) Directional or informational signs for customer location of the type of service or product advertised shall be clearly and prominently displayed on the station premises in a manner not misleading to the public.

85.29(9) The advertising of other commodities or services offered for sale by petroleum retailers in such a way as to mislead the public with regard to petroleum product pricing shall be prohibited.

85.29(10) Ethanol blended gasoline classified with an octane rating of 87 or higher may be labeled or advertised as “super” or “plus.”

85.29(11) The octane rating of fuel offered for sale shall be posted on the pump in a conspicuous place. The octane rating shall be posted for registered fuels. No octane rating shall be posted on the pump for ethanol blended gasoline classified as higher than E-15. The minimum octane rating for gasoline offered for sale by a retail dealer is 87 for regular grade gasoline and 91 for premium grade gasoline.

85.29(12) A wholesale dealer selling ethanol blended gasoline or biodiesel fuel to a purchaser shall provide the purchaser with a statement indicating the actual volume percentage present. The statement may be on the sales slip provided or a similar document such as a bill of lading or invoice. This statement shall include the specific amount of biodiesel, even if the amount of renewable fuel is 5 percent or less.

This rule is intended to implement Iowa Code sections 214A.3, 214A.16 and 215.18.

21—85.30(214A,215) Gallonage determination for retail sales. The method of determining gallonage on gasoline or diesel motor vehicle fuel for retail sale shall be on a gross volume basis. Temperature correction or any deliberate methods of heating shall be prohibited.

This rule is intended to implement Iowa Code sections 214A.3 and 215.18.

21—85.31(214,214A,215) Blender pumps. Motor fuel blender pumps or blender pumps installed or modified after November 1, 2008, that sell both ethanol blended gasoline classified as higher than E-15 and gasoline need to have at least two hoses per pump to separate registered gasoline fuels from flex fuels.

This rule is intended to implement Iowa Code section 214A.2.

21—85.32 to 85.39 Reserved.

MOISTURE-MEASURING DEVICES

21—85.40(215A) Testing devices. All moisture-measuring devices will be tested against a measuring device that will be furnished by the department, and all moisture-measuring devices will be inspected to determine whether they are in proper operational condition and supplied with the proper accessories.

This rule is intended to implement Iowa Code section 215A.2.

21—85.41(215A) Rejecting devices. Moisture-measuring devices may be rejected for any of the following reasons:

85.41(1) The moisture-measuring device tested is found to be out of tolerance with the measuring device used by the department by one of the inspectors so assigned by more than 0.7 percent on grain moisture content.

85.41(2) The person does not have available the latest charts for the type of device being used.

85.41(3) The person does not have available the proper scale or scales and thermometers for use with the type of device being used.

85.41(4) The moisture-measuring device is not free from excessive dirt, debris, or cracked glass or is not kept in good operational condition at all times.

This rule is intended to implement Iowa Code section 215A.6.

21—85.42(215,215A) Specifications and standards for moisture-measuring devices. The specifications and tolerances for moisture-measuring devices are those established by the United States Department of Agriculture as of November 15, 1971, in chapter XII of GR instruction 916-6, equipment manual, used by the Federal Grain Inspection Service; and those recommended by the National Bureau of Standards and published in National Bureau of Standards Handbook 44 as of July 1, 1985.

This rule is intended to implement Iowa Code section 215A.3.

21—85.43(215) Testing high-moisture grain. When testing high-moisture grain, the operator of a moisture-measuring device shall use the following procedure: Test each sample six times, adding the

six measurements thus obtained and dividing the total by six to obtain an average, which shall be deemed to be the moisture content of such sample.

This rule is intended to implement Iowa Code section 215A.7.

21—85.44 to 85.49 Reserved.

TESTING AND ACCURACY

21—85.50(452A) Electric vehicle charging stations.

85.50(1) The department will inspect licensed electric fuel dealers and users for accuracy and correctness from a list provided by the department of revenue.

85.50(2) The specifications and tolerances for electric fuel and charging stations shall be those as published in the NIST Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices, amended or revised as of January 1, 2023, in the state of Iowa, except as modified by state statutes, or by rules adopted and published by the department.

85.50(3) A charging station and each connector installed on a charging station will be tested for accuracy and correctness utilizing a measuring device that will be furnished by the department and tested against the electric fuel meter serving that charging station.

85.50(4) For purposes of this rule, “connector” means the portion of the charging station that directly interfaces, connects or plugs into an electric vehicle through which electric fuel is supplied to an electric vehicle.

This rule is intended to implement Iowa Code section 452A.21.

[Filed 11/17/23, effective 1/17/24]

[Published 12/13/23]

EDITOR’S NOTE: For replacement pages for IAC, see IAC Supplement 12/13/23.